The Report Committee for Leslie Andrea Lewis
Certifies that this is the approved version of the following Report:

A Technology-Based Intervention for Mental Health Service Provider Burnout

APPROVED BY
SUPERVISING COMMITTEE:

Ricardo Ainslie, Supervisor

Mike Parent

A Technology-Based Intervention for Mental Health Service Provider Burnout

by

Leslie Andrea Lewis

Report

Presented to the Faculty of the Graduate School of

The University of Texas at Austin

in Partial Fulfillment

of the Requirements

for the Degree of

Master of Arts

The University of Texas at Austin

August 2019

Abstract

A Technology-Based Intervention for Mental Health Service Provider Burnout

Leslie Andrea Lewis, M.A.

The University of Texas at Austin, 2019

SUPERVISOR: Ricardo Ainslie

This proposal aims to draw upon previously applied interventions in the field of mental health service provider burnout to create an accessible, efficient, and cost-effective technology-based intervention option for providers. The understanding of burnout as described in this paper draws from a multifaceted definition of burnout proposed by Maslach et al. (1993, 1996), and uses Buunk & Schaufeli's (1993) discussion of social comparison theory (e.g., Taylor, Buunk, & Aspinwall, 1990; Taylor & Lobel, 1989) and social exchange theory (e.g., Buunk & VanYperen, 1991; Walster, Berscheid, & Walster, 1978), to conceptualize burnout in mental service providers. The proposed study will use a pre- and post-test design to determine efficacy, as well as a six-week and six-month follow up. Results from the proposed study could inform future burnout interventions for mental health service providers.

Table of Contents

Chapter 1: Introduction

The concept of burnout first entered the research field in the 1970's, and though burnout has been defined in a number of ways since then, (Burke & Richardsen 1993; Cherniss 1980; Pines & Aronson 1988; Stalker & Harvey 2002), the Maslach et al. (1993, 1996) definition is most used in burnout research. This definition is a multifaceted view of burnout: "a psychological syndrome of emotional exhaustion, depersonalization, and reduced personal accomplishment that can occur among individuals who work with other people in some capacity." The dimension of emotional exhaustion refers to feelings of being emotionally overextended and depleted of one's emotional resources. Depersonalization, also referred to as cynicism, denotes a negative, callous, or excessively detached response to other people (usually those that are consumers of one's services or care) as well as towards work in general. Reduced personal accomplishment refers to a decline in one's feelings of competence and successful achievement in one's work. Though burnout is associated with other mental health conditions, research supports the view that burnout is distinct from mental conditions such as depression, anxiety, and general stress reactions, as well as other work-related effects such as job dissatisfaction (Awa, Plaumann, & Walter, 2010; Maslach, Schaufeli, & Leiter, 2001).

Burnout is a cross-cultural phenomenon that is prevalent in a variety of jobs and fields (Leiter & Schaufeli 1996; Stalker & Harvey 2002). It is pervasive in the mental health field, with up to 67% of providers endorsing high levels of burnout (Morse, Salyers, Rollins, Monroe-DeVita, & Pfahler, 2012). The unique environment and job expectations of a mental health provider can make for a highly stressful environment. As shown by Sjølie, Binder, & Dundas (2015), exposure to intense emotional suffering, suicidal ideation, and traumatic life events are a regular part of a

mental health provider's job. Despite having similarities in operational definition, research indicates that burnout is distinct from secondary traumatization, vicarious traumatization, and compassion fatigue (Canfield, 2005; Dunkley & Whelan, 2006; Figley, 1995). Additionally, social and political stressors associated with working in the mental health field come into play, such as lack of funding, job instability, and understaffing (Honberg, Kimball, Diehl, Usher, & Fitzpatrick, 2011; Sørgaard, Ryan, Hill, & Dawson, 2007). Burnout is costly to public mental health given the large expense in recruiting and training staff (Gilbody, Cahill, Barkham, Richards, & Glanville, 2006), and the United States federal government identified burnout as one of the most problematic factors in keeping well-trained and competent staff in "treatment organizations and state behavioral health systems" (Hoge, Morris, Daniels, Stuart, Huey, & Adams, 2007, p. 16).

Chapter 2: Literature Review

This paper will begin by reviewing the existing literature in regard to mental health provider burnout. The prevalence of burnout among mental health providers along with associated problems for the mental health field will be reviewed. Additionally, a short look at the research surrounding applied interventions and their efficacy will be provided as context and rationale for the proposed intervention.

PREVALENCE

As mentioned previously, studies show that mental health workers experiencing high levels of burnout range anywhere from 21-67% (Morse et al., 2012). Since the construct of burnout tends to be measured as a continuous variable, determining what constitutes high levels of burnout (or what constitutes the classification of burnout at all) can be difficult. Maslach et al. (2001) determined score ranges on the Maslach Burnout Inventory (MBI) to help conceptualize what qualifies low, average, and high levels of burnout based on large normative samples across various professions. For those working in mental health, high burnout was constituted from scores of at least 27 out of 54 possible points in emotional exhaustion, at least 13 out of 30 possible points in depersonalization, and personal accomplishment scores at or below 21 out of 48 possible points. It should be noted that empirical evidence to support these cut-off scores is lacking, and, as noted by Morse et al. (2012), low cut-off scores to receive a high burnout classification in the mental health field might be inflating the prevalence of burnout in some studies. However, there is also some evidence that burnout may become a chronic condition. Burke and Richardsen's (1993) review of the general literature suggests that untreated burnout remains stable over time, with about 40% of workers remaining in the same stage of burnout after

one year, 30% becoming more burned out, and 30% becoming less burned out. Because of this, any amount of burnout in providers should be taken seriously, even if the empirical evidence for cut-off scores is not robust.

In prevalence studies of burnout, most findings were presented in one or all of the subcategories of emotional exhaustion, depersonalization, and personal accomplishment versus a singular burnout score. Siebert (2005), however, did use a single item burnout measure wherein 18% of the sample endorsed the statement: "I currently have problems with burnout." Additionally, in their study of 751 social workers, 36% scored in the high range of emotional exhaustion. Webster and Hackett (1999) presented a study of 151 community mental health workers in Northern California and found that 54% had high emotional exhaustion and 38% reported high depersonalization rates. However, in this sample most also reported high levels of personal accomplishment. Rohland's (2000) study of 29 directors of community mental health centers in Iowa resulted in more than 66% presenting with high emotional exhaustion and low personal accomplishment, with almost half presenting high levels of depersonalization. Oddie and Ousley (2007) studied 71 forensic mental health workers in the UK, where more than half reported high rates of emotional exhaustion. Oddie and Ousley (2007) reviewed previous studies in the UK and found a range of emotional exhaustion between 21-48% in the mental health field. These wide ranges in burnout rates found in the research are further evidence of the need for further research into the phenomenon.

Comparative rates of burnout between various mental health professions has generally not been done in the field of research, though there are indications that such work could lead to insight about specific factors of burnout in some fields compared to others. For example, research has shown lower job satisfaction in social workers compared to psychiatrists and has shown

differences in burnout between inpatient and community-based work settings, wherein inpatient staff reported lower levels of burnout and work stress than community-based staff (Prosser, Johnson, Kuipers, Szmukler, Bebbington, & Thornicroft, 1997). Rupert and Kent (2007) determined different levels of personal accomplishment in psychologists who work independently and in group practices compared to psychologists working in agency settings like hospitals and community-based programs, where independent and group practice-based psychologists had higher levels of personal accomplishment.

ASSOCIATED PROBLEMS FOR THEMENTAL HEALTH FIELD

Burnout has consistently been shown to coincide with adverse outcomes for mental health providers, their clients, and service-providing organizations. Since burnout puts the individual provider at personal risk for mental and physical health problems, it comes as no surprise research has shown it to have substantial impact on consumer outcomes, as well.

Mental and Physical Health Problems

Though burnout has been defined primarily in terms of emotional and mental resource depletion, correlations have also been found with averse physical symptoms. In his study involving 591 social workers, Acker (2010) found that the primary dimensions of burnout measured by the BMI were predictors of flu-like symptoms and gastroenteritis. Emotional exhaustion and depersonalization were both positively correlated with the somatic symptoms, while – as expected – personal accomplishment was negatively correlated with the measured somatic symptoms. In a comparative study between burnout/exhausted groups and disengaged/non—burnout groups, Peterson, Demerouti, Bergström, Samuelsson, & Nygren, (2008) found that self-reported psychological symptoms such as anxiety, depression, and memory impairment discriminated the

two groups, as well as physical impairments such as sleep disturbance and neck and back pain. Employees that reported being burnt out and exhausted also were more likely to consume alcohol and less likely to engage in physical exercise. Based on a standardized clinical interview, providers with mild burnout were at 3.3 times more risk of having major depressive disorder, whereas severe burnout was put those at 15 times the risk of major depressive disorder (MDD). Surprisingly, the risk of MDD with severe burnout was almost three times as great for men as for women, with men having a 29.5-fold risk of MDD and women having a 10.2-fold risk. Additionally, Rohland (2000) found in directors of mental health agencies a correlation between burnout and increased substance use.

Adverse Client Outcomes

Provider's expectations for client recovery are rated more negatively when experiencing burnout (Rollins et al., 2016). These negative expectations for client outcomes could be impacting the biases and have been linked with poorer outcomes for clients with severe mental illness (Gowdy, Carlson, & Rapp, 2003). Holmqvist and Jeanneau (2006) found in a study of 510 psychiatric workers in 28 different units the dimensions of emotional exhaustion and depersonalization were correlated with negative attitudes (e.g., distant, rejecting) toward consumers on the provider's ward. A survey of 333 mental health staff on 31 different teams of consumers with severe mental illness, team level exhaustion was significantly inversely related to average consumer satisfaction scores for those teams (Garman, Corrigan, & Morris, 2002).

Adverse Organizational Outcomes

Workers in the public sector have to deal with increased administrative control, finite resources, and (despite evidence in some cases that ongoing and long-term support is needed for

specific mental disorders) the pressure to focus on short-term care with measurable outcomes. There is inconsistency in ideology between mental health service providers and program managers, wherein mental health service providers have to balance advocacy for their clients with the organization goal of cost control. This discrepancy has been shown to be a large source of frustration for providers (Acker, 2010). Absenteeism is another adverse outcome for organizations. One study found those in the highest quartile of burnout to take more than twice the number of sick days as their non-burnout colleagues (Borritz, Rugulies, Bjorner, Villadsen, Mikkelsen, & Kristensen, 2006). Additionally, Salyers et al. (2015) found that those experiencing burnout had higher intentions to quit. The total contributions of burnout-induced absenteeism, sick leave, and employee turnover comes at a substantial cost to the employer.

PREVIOUS INTERVENTIONS

The topic of burnout entered the research scene and psychological vernacular in the 1970's, and a lot has been written in regard to burnout since that time. However, burnout specifically associated with mental health providers is still a largely unexplored field of research. In a meta-analysis by Dreison, Luther, Bonfils, Sliter, McGrew, & Salyers (2016), twenty-seven unique samples spanning over thirty-five years of research were observed and analyzed. The results show significant effect on burnout reduction in mental health providers, and the sample suggests that positive effects from burnout interventions are maintained over time. A similar meta-analysis done in 2012 by Morse et al. found similar results but noted that Awa et al. (2010) found individual-focused interventions' effects often wore off 6-12 months following the intervention if the individual was not provided with additional booster sessions. However, many holes in the research still need to be addressed. Many studies in this specific area lack descriptive data, making it impossible to assess what associations, if any, variables such as ethnicity, gender,

education level, and job tenure might have on the measurement outcome. Because this study found that person-directed interventions were more effective than organization-directed interventions at reducing emotional exhaustion (the most robust dimension of burnout), this literature review will primarily focus on the person-directed interventions that were found.

The Morse et al. (2012) meta-analysis found many different approaches to burnout intervention. Some were more unique and specialized, such as a recreational music making program (Bittman, Bruhn, Stevens, Westengard, & Umbach, 2003), or a humanistic approach with heavy spiritual emphasis (van Dierendonck, Garssen, & Visser, 2005). Most interventions, though, could be categorized in the broad categorical definition of cognitive-behavioral therapy. This includes providing educational information, cognitive restructuring, progressive muscle relaxation, social skills training, communications skills training, and skills to enhance social support (Murphy, 1996; van Dierendonck, Schaufeli, & Buunk, 1998). Evaluations of person-centered interventions are encouraging and show that programs which incorporate coping skills into the intervention program are often effective in reducing burnout, with especially promising results in the dimension of emotional exhaustion. A study by Murphy (1996) found that programs which integrated a combination of intervention strategies and programs that incorporated meditation were typically the most effective. The meta-analysis also found that the majority of the person-centered intervention programs focused on providing coping strategies to mediate negative outcomes rather than prevention via increasing positive outlooks and skill building. Krasner et al. (2009) was the only intervention in the meta-analysis that did this, such as increasing sense of meaning and purpose. It was also found in one study that aligning personal and organizational values was related to increased job satisfaction (Robey, Ramsland, & Castelbaum, 1991).

Chapter 3: Theoretical Framework: Social Comparison Theory and Social Exchange Theory

This conceptualization is largely based off of the chapter of *Professional Burnout: Recent Developments in Theory and Research* written by Buunk & Schaufeli (1993) and includes the research they did in establishing this theoretical framework. While other theoretical frameworks for burnout exist, research shows that person-based interventions work better than organization-based interventions (Dreison et al., 2016). Additionally, some evidence has shown that burnout is more likely to occur in some organizations and working units than others (Edelwich & Brodsky, 1980; Golembiewski & Munzenrider, 1988). Edelwich & Brodsky (1980) stated that burnout in human services is like "staph infection in hospitals: it gets around. It spreads from clients to staff, from one staff member to another, and from staff back to clients. Perhaps it should be called staff infection" (p. 25). Puns and jokes aside, Golembiewski and Munzenrider (1988) found that between 70% and 86% of the providers in their study that classified as burned out were in work groups having at least 50% of their members ranking in the highest levels of burnout. They theorize that work groups tend to homogenize around specific levels of burnout. In a study by Sullins (1991), mood convergence was common when witnessing another individual undergo the same experiment as you. Negative moods appeared to be more easily spread than positive moods, suggesting that burnout symptoms would likely be a candidate for emotional contagion. Thus, a theory of burnout that was interpersonal in nature made the most sense for conceptual use in this proposed study.

The central thesis proposed by Buunk and Schaufeli (1993) is that burnout develops primarily in a social context, and a better understanding of the progression and endurance of burnout can be attained when we observe the way individuals perceive, interpret, and construct

the behaviors of others at work. As Maslach (1982) noted, a characteristic of burnout in human service professionals is that stress is created from the social interaction between provider and consumer. In these relationships, social exchange processes such as expectations of equity and reciprocity play a large role. Additionally, theory would suggest that individual providers will be inclined to deal with their stress by engaging in social comparisons, particularly with those in similar positions. This theory of social comparison is the primary theoretical framework informing the structure of the intervention and will be looked at with the most detail. The following section will discuss these relationships more.

SOCIAL COMPARISON THEORY, STRESS, AND AFFILIATION

Research on stress and social comparison began in 1959 by Schacter in his classic experiments on the relationship between fear and affiliation. Previous research had been done on social comparison in the domains of evaluation of abilities and opinions (Festinger, 1954), this was the first work to expand social comparison to the domain of emotions. The research studies showed that women experiencing fear because they were about to receive electric shocks wanted to be with someone else as long as that person was in the same situation. Schacter theorized that people under stress want to be with others for reasons of self-evaluation – to assess whether or not their own actions and reactions are appropriate for the situation. Another study done later by Gerard (1963) substantiated this further by showing that the need for comparison is even greater when an individual is not sure about how to feel or react.

Later decades saw a resurgence of interest in social comparison theory, particularly social comparison motivated my self-enhancement. Wills (1981) suggested directional comparison patterns; those confronted with threats to their self-esteem will engage in downward comparison

with people who are viewed as less competent or less successful in attempt to restore the way the individual feels about themselves. Several survey studies have shown that individuals faced with objectively stressful situations such as disease and crisis, arthritis patients (Blalock, McEvoy-DeVellis, & DeVellis, 1989), mothers of medically strained infants and women with infertility problems (Affleck & Tennen, 1991), and cancer patients (Wood, Taylor, & Lichtman, 1985) had a tendency to compare themselves to those they perceived as worse off and were also prone to viewing themselves as being in a better position than people in a similar or the same situation. In arthritis patients, the perception of doing better than others also led to increased satisfaction with their own performance (Blalock et al., 1989). Seemingly at odds with this information, cancer patients indicated a preference for affiliation with others who were similar or better off (Molleman, Pruyn, & Van Knippernberg, 1986). Similarly, individuals in unhappy marriages indicated a preference for affiliation with those who had better marriages, whereas those with happy marriages preferred affiliates who were as happy as they were. It is important to distinguish one key factor between the preferred downward and upward comparisons: imagination versus affiliation. The implication from the research, as discussed by Taylor and Lobel (1989), is that those in stressful situations like to *think* about those worse off but prefer actual contact with those who are doing better. As they argue, people in stressful situations are faced with two major coping tasks: to regulate their emotions (which could be harder to do with people in worse off situations, given the contagious effect of negative emotions) and to obtain relevant problem-solving information (which is seemingly more accessible from a population doing better than they are currently). Thus, the desire for affiliation with those doing better is not just for the affiliation component, but also to obtain information and motivate towards self-improvement.

TYPICAL STRESSORS OF MENTAL HEALTH SERCICE PROVIDERS AND ASSOCIATED PERSONALITY TRAITS

To empirically study this theoretical framework's relationship to burnout, Buunk and Schaufeli (1993) studied three typical stressors seen in the field of nursing that can be extrapolated to the mental health service provider. They also studied self-esteem due to its role in social comparison processes (Buunk, Collins, Van Yperen, Taloy, & Dakoff, 1990; Wills, 1991) and two personality variables. These personality variables play an important role in the development of burnout and are related to social comparison theory and social exchange theory.

The first stressor identified by the researchers is *uncertainty*. According to Buunk, VanYperen, Taylor, & Collins (1991), uncertainty is a major factor in initiating social comparison. The concept of uncertainty employed in this particular model does not refer to the uncertainty in an environment, but to the lack of clarity about what to feel and think, or regarding the correct way to act. Uncertainty is a constant in the mental health service provider field, and questions about what approach to take with a patient and whether the right choice was made are a frequent part of the job. The insecurity surrounding whether or not one made the correct clinical decision with a patient is important, as Cherniss (1980) suggested that doubts surrounding competence was a source of stress that led to burnout in human service professionals. The next stressor has deep roots in social exchange theory and is referred to as *imbalance*: the disparate relationship between investments and outcomes with patients (Walster et al., 1978). The assumption in social exchange theory is that it is a basic human tendency to expect a reciprocal award, such as gratitude, for those we have shown caring, empathy, and attention. This can be problematic, as relationships in the mental health field are inherently unequal. Providers may feel with patients experiencing poor outcomes that what they are putting into the relationship is not in

proportion to what they are getting out of it. The final stressor identified in this discussion is *lack of control*. Lack of control tends to be a pivotal point in most stress theories and has been shown to affect the mental health and well-being of people working in organizations (Ganster, 1989). Providers in the mental health field may experience many aspects of the job that are outside of their control, such as consumer recovery, organizational culture, funding, administrative decisions, consumer cooperation, lack of social support, as well as many other imaginable situations where control is out of their hands.

The first personality dimension relevant to burnout is *reactivity*, a dimension of temperament associated with exhibiting stronger physiological stress reactions (Strelau, 1983). People with this temperament seem to score higher in emotional exhaustion, and there is evidence they are more inclined to give in to social pressure (Elliasz, 1980). The second is *exchange orientation*, which refers to an individual's orientation towards reciprocity in a relationship, or those who "expect immediate and comparable rewards when they have provided rewards for others and who feel uncomfortable when they receive favors they cannot reciprocate immediately" (Buunk and Schaufeli, 1993, p. 57).

DIFFERENTIAL CORRELATIONS OF THE BURNOUT DIMENSIONS

Buunk and Schaufeli (1993) found in their study a unique interaction effect partially predicting each of the burnout dimensions of emotional exhaustion, depersonalization, and lack of personal accomplishment. Additionally, they found a relationship between each of the indicated stressors of the field and the burnout dimensions. Out of the stressors, imbalance maintained the strongest relationship and directly impacted all three burnout dimensions. Uncertainty played at

least some role in all three dimensions, and lack of control had the weakest connection to each of the burnout dimensions.

For emotional exhaustion, the primary interaction took place between reactivity and uncertainty. Emotional exhaustion was highest in those with high levels of reactivity who felt the most uncertain about how to behave and to feel. High uncertainty was always met with higher levels of emotional exhaustion, but a low level of reactivity mediated the effects of uncertainty substantially. Strelau's (1983) study showing that less reactive individuals typically employed more effective and active coping strategies is in line with this finding.

Depersonalization had its own unique interaction effect and was directly related to self-esteem. Though depersonalization is more characteristic of those with low self-esteem, the more interesting finding for this theoretical framework is the important role that exchange orientation and uncertainty play in depersonalization. The study found that when uncertainty is low, there is hardly a difference in levels of depersonalization between those with high exchange orientation and those with low exchange orientation. When uncertainty increases, though, those with high exchange orientation will become much more likely to devalue their patients than those on the lower end of the exchange orientation spectrum. Another study by VanYperen, Buunk, & Schaufeli, (1992) had interesting results in relation to depersonalization. This study showed the impact of communal orientation, or the "desire to give and receive benefits in response to the needs of and out of concern for others, and to help others when they are distressed" (p.59). The study showed that those high in communal orientation showed little regard for the imbalance in their relationships, but for those low in communal orientation the imbalance was clearly related to burnout. According to the study, those that do not have a strong need for reciprocity in their relationships with consumers are not at risk for developing feelings of depersonalization.

Similarly, Cherniss and Krantz (1983) found very little evidence of burnout in what they referred to as “ideological communities.” These service providers were found in settings where they highly identified with the organization’s ideology.

The final burnout dimension, personal accomplishment, was related to the interaction of self-esteem and lack of control. Not surprisingly, those with low self-esteem generally felt a lower level of personal accomplishment. What is surprising, though, is that those with high self-esteem face nearly the same levels of reduced personal accomplishment when lack of control is high. This shows that those with low self-esteem as well as high self-esteem might feel their self-efficacy threatened when working in an environment beyond their control.

Chapter 4: Rationale and Proposed Study

Despite the wide body of evidence that has been amassed about the prevalence of mental health provider burnout and its negative effects on provider, consumer, and the market, few interventions have been implemented to remediate the phenomenon. Due to the time and financial strain put on mental health service providers, the studies that have been done have often been subject to poor methodology and execution; some have not even reported the percentage of retention through the entire program. Due to these factors, burnout intervention programs for mental health service providers remains to be a needed field of research.

The small amount of research that has been done previously, however, points to a few clear next steps in the research as well as needs that intervention programs will have to meet. Meta-analyses have repeatedly shown person-centered interventions (based on individual coping strategies for burnout) to be more effective than organization-based interventions (based on systemic problems that affect burnout) (Dreison et al., 2016). Nevertheless, the effects of these interventions are shown to depreciate over time, and studies show participants would largely benefit from booster sessions to refresh the taught material. The cost of bringing in professionals for regular burnout upkeep coupled with the time commitment of seminars for providers that are all too often already worn thin does not make this option accessible to the majority of organizations and providers. Additionally, providers operating privately do not have the benefit of in-house seminars that larger organizations do. With this information (which is often stated verbatim as limits in interventions and their analyses), an easy, accessible, and affordable solution for burnout prevention would greatly impact the ability for service providers to access the

information on their own time frames as well as for the organizations to ensure boosters are readily available when needed on an individual basis.

The theoretical framework proposed as a lens to view the concept of burnout also has several implications for an intervention. For starters, as previously discussed the social comparison theorem states that those who are experiencing the most burnout could benefit from both downward and upward comparison but feel too embarrassed of the stigma attached to admit to those around them that they are experiencing burnout. Additionally, because those with positive team affiliations tend to do better in the dimension of depersonalization, it is not wise to risk the organizational culture for the sake of downward affiliation. This leads to the question of how to achieve the confidence-increasing downward affiliation and the aspirational upward affiliation without making an individual risk the public and professional (whether real or perceived) stigma attached with admitting the need for help. A technology-based intervention is in a unique position to answer such questions. Thus a "hypothetical other" can be provided those experiencing burnout. In some circumstances the other could be a downward affiliation (i.e., "Others in your position have quit their job, but you're still here," or "Not all who experience burnout are bold enough to take steps like you have to prevent it," etc.) and sometimes the other could be an upward affiliation (i.e., "Others who have successfully dealt with burnout did so by…").

With this in mind, I am proposing a study that takes a previously tested intervention program, BREATHE, and develops it to an online platform (Salyers, Hudson, Morse, Rollins, Monroe-DeVita, Wilson, & Freeland, 2011). BREATHE is one of the few intervention programs for mental health service providers that has been replicated (Rollins et al., 2016). The replication had similar positive results to the initial study, though there is room for growth in delivery and

accessibility. Though the effect size is marginal, it is consistent and is maintained over a six-week follow-up period. Changing the modality and duration of the program to be more in line with social comparison theory without changing the content could provide insight into the efficacy of the intervention material and the hypothesis proposed by Rollins et al. (2016) that spacing out the core curriculum of the intervention over a period of time will improve its efficacy. BREATHE focuses on burnout prevention principles, experiential exercises, and skill building in six major areas: practices, social, physical, cognitive-philosophical, imagery, and other self-care activities. Participants are also provided with a toolkit to help identify personal warning signs and triggers of burnout in order to help prevent relapse. If the principles and teachings of this intervention are divided into manageable sizes and applied to an accessible online program, learning about burnout and follow-up maintenance would be easier and less stressful for mental health service providers. Online tools have been utilized previously for clients and other service providers previously with marginal success, though these were not specifically targeting burnout.

RESEARCH QUESTIONS AND HYPOTHESES

Based on the review of the literature, the following research questions and hypotheses were created for the proposed study:

Research Question 1

To what extent can an online intervention reduce rates of burnout symptoms emotional exhaustion and depersonalization for mental health service providers in an organizational setting?

Hypotheses 1a

It is expected that rates of emotional exhaustion will be significantly decreased immediately following completion of the program, as well as at a six-week and six-month follow up point.

Hypotheses 1b

It is expected that rates of depersonalization will be significantly decreased immediately following completion of the program, as well as at a six-week and six-month follow up point.

Rationale 1

The research involving the BREATHE method (Salyers et al., 2011; Rollins et al., 2016) has shown significant decreases in emotional exhaustion and depersonalization following completion of one day of BREATHE training. As suggested by Rollins et al. (2016), dividing the content of the program into smaller modules delivered over a certain period of time instead of one day might encourage more consistent and continued use of burnout prevention strategies. They also had concern that converting the training to multiple sessions might create obstacles and time restraints for participants, however this concern should be mitigated by the method of delivery of material. Online access allows participants to retrieve the information on their own time as opposed to a set aside time for a session that might interfere with their work schedule. Reducing these dimensions of burnout is the primary driver in this study, as they have been shown to be the most robust dimensions of burnout (Salyers et al., 2011).

Research Question 2

To what extent can an online intervention in mental health service provider burnout increase rates of personal accomplishment in providers in an organizational setting?

Hypothesis 2

It is expected that rates of personal accomplishment will remain unchanged following the intervention.

Rationale 2

Previous studies using this intervention method have not resulted in statistically significant levels of change in the dimension of personal accomplishment (Salyers et al., 2011; Rollins et al., 2016). Additionally, it has been suggested that a two-dimensional view of burnout that does not include personal accomplishment be adopted due to previous research that indicates emotional exhaustion to be the most robust dimension of burnout and sense of personal accomplishment to be the least robust dimension (Salyers et al., 2011).

Research Question 3

To what extent can an online intervention in mental health service provider burnout increase rates of job satisfaction and decrease intentions to leave the position in providers in an organizational setting?

Hypothesis 3a

It is expected that rates of job satisfaction will remain unchanged following the intervention.

Hypothesis 3b

It is expected that rates of intentions to leave the position will remain unchanged following the intervention.

Rationale 3

Previous studies have shown no significant change in job satisfaction and intentions to leave the position. As noted by Salyers et al. (2011), these outcomes are multi-faceted, with many of the dimensions playing into them (such as pay) resting outside the scope of this intervention. Prior studies have found mixed results in terms of burnout predicting job satisfaction or turnover. For this reason, these dimensions are seen as secondary and distal to from the intervention.

Research Question 4

To what extent can an online intervention in mental health service provider burnout increase rates of consumer optimism in providers in an organizational setting?

Hypothesis 4

It is expected that rates of consumer optimism will increase following completion of the intervention, as well as at a six-week and six-month follow up point.

Rationale 4

Previous studies have shown increased rates of consumer optimism following the intervention (Salyers, et al., 2011). This is viewed as secondary or distal to the study, but provider views of consumer outcomes have been shown to have significant effects on consumer outcomes (Gowdy et al., 2003).

Additional Research Questions

This study intends to collect demographic information about the participants that has been lacking in previous studies. No specific research questions are proposed, as there is not enough evidence to back up current hypotheses, however we aim to be curious about what the effects of an individual's demographic information could have on burnout intervention for mental health service providers.

Chapter 5: Methods

PARTICIPANTS

The Children's Advocacy Center (CAC) is a nation-wide service available for children being taken out of sexually abusive situations through the National Children's Alliance (NCA). The Center's objective is to reduce strain on law enforcement, medical care, mental health care, lawyers, and other professionals involved in the immediate procedures following a child being removed from an abusive situation. More importantly, the center's goal is to provide a coordinated and compassionate approach for the child that seeks to reduce re-traumatization. Their goal is to make their services available to every child in America. Several locations of the Center will be chosen to recruit participants for this initial study.

Convenience sampling will be utilized to recruit participants from CAC. Due to the vast amount of different locations represented by CAC sites, several locations from different geographic regions will be selected to participate in this study. Only locations with manager buy-in and commitment will be considered. Manger buy-in will be very important, which makes CAC a good candidate as per its history of investing in trainings and seminars that benefit its employees. To be eligible for the proposed study, employees must be a full-time working mental health service provider. In order to recruit participants and incentivize them to complete all of the modules, managers will be encouraged to offer an additional vacation day upon completion of the program, as well as CEU credits. They will also be utilized to help recruit participants via email and verbal reminders during department meetings. G* Power Version 3.1 software (Faul, Erdfelder, Buchner, & Lang, 2009) was utilized to determine the proposed sample size. Using a matched pairs *t*-test model, a minimum sample size to detect significance assuming a power of

0.95, an effect size of f^2=0.5, and an alpha level of 0.05 would be 45 participants. To ensure that the needed sample size is obtained and account for any drop in intervention completion, 75 individuals will be recruited for this study.

RESEARCH DESIGN AND PROCEDURES

Prior to collecting data, the proposed study must be approved by the Institutional Review Board (IRB) for the Protection of Human Subjects at The University of Texas at Austin. The proposed study must adhere to IRB guidelines as well as the ethical standards of the American Psychological Association and the Department of Educational Psychology at The University of Texas at Austin.

Once IRB approval has been obtained, the pre-test measures will be distributed using an online survey program called Qualtrics, which is a password-protected website. The hyperlink affiliated with the Qualtrics survey will be distributed to the managers involved in recruitment and via email to the participants that expressed interest from the recruitment period.

Upon opening the survey, participants will be prompted to read information about informed consent which contains details about the purpose of the study, participant rights, and contact information for the researcher. After reading the informed consent, providers who agree to participate in the study will be directed to the online questionnaire, while those who do not consent to participation will be directed to the end of the survey. The survey will take approximately 30-45 minutes to complete and will contain a demographic questionnaire and four measures of interest: Maslach Burnout Inventory for Human Services (Maslach, Jackson, & Leiter, 1996), the Job Diagnostic Survey (Hackman & Oldham, 1975), measures of intentions to leave their position, and the Provider Expectations for Recovery Scale (Salyers, Tsai, & Stultz,

2007). These measures have been used in previous implementations of this intervention and will be used for consistency and comparative reasons. These same measures will be used for a six-week and six-month follow up, in addition to a single-item question determining how frequently, if at all, the provider returned to the information provided as a booster. The complete description of the scales used for this study is in the appendices.

Once baseline levels are determined with the initial testing, the intervention will be distributed to participants. The intervention will be divided up into seven modules; introduction to burnout and prevention practices, contemplative practices, social, physical, cognitive-philosophical, imagery, and other self-care activities. Each module will have two subsections – one that confers the information and one that includes an experiential exercise. An online platform will be developed to deliver the information and exercises to participants, including email reminders for modules that have not been completed or have just been made available. In order to ensure participants are partaking in this intervention over a period of time rather than all at once, one module will be made available every week, with each of its subsections available for the provider to do in the time frame that best suits them. Here again manager buy-in will be important, as we will encourage managers to send email reminders and verbal reminders in staff meetings. Once all modules are complete, participants will be given access to a "relapse toolkit" that includes follow-up materials and encourages participants to note their own triggers for burnout and to seek help via the boosters when the triggers come into play.

MEASURES

Demographics

Due to a lack of demographic information provided in burnout intervention research, participants will complete a simple demographic questionnaire that asks them to identify their race/ethnicity, education level, gender identity, socioeconomic status (SES), relationship status, parent/ guardian's education level, and household geographic area. Minimal evidence has shown from one study that racial identity and gender might play a role in intention to seek help for burnout (Rollins et al., 2016). Additionally, pay level has been shown to mediate the stress that leads to burnout, and pay is often associated with gender, education, parental education, and SES (Lum, Kervin, Clark, Reid, &Sirola., 1998).

Maslach Burnout Inventory for Human Services

The MBIHS version (Maslach, Jackson, & Leiter, 1996) will be used to measure job burnout. The dimensions are organized into three subscales: emotional exhaustion (feelings of being emotionally overextended and exhausted by one's work), depersonalization (impersonal attitudes toward recipients of care), and lack of personal accomplishment (feelings of competence and successful achievement of one's work). An additional optional subscale of involvement is included, though it is seen as distal to the definition of burnout this measure is based off of. Feelings of being overextended or exhausted by work are measured by the emotional exhaustion subscales. Negative attitudes and feelings towards others at work are measured by the depersonalization scale. The tendency to view oneself in a negative manner is measured on the personal accomplishment subscale. Each subscale is scored separately. A 7-point Likert-type scale is used for scoring 25 items with 0 = *never* and 6 = *every day*. Internal consistency has been

reported by Cronbach's alpha, including subscale consistency of .83 for emotional exhaustion, .74 for personal accomplishment, and .77 for depersonalization (Maslach, Jackson, & Leiter, 1996). The MBI is considered to be the primary measure for this study, with other measures looking at distal concepts to the research questions.

Job Diagnostic Survey

Job satisfaction will be assessed with the JDS. The JDS details five core job dimensions that affect satisfaction on-the-job: skill variety, task identity, task significance, autonomy, and feedback. Additionally, the JDS has been shown to have good internal consistency (Hackman & Oldham, 1975) and evidence of convergent and divergent validity (Fried, 1991).

Intentions to Leave their Position

Each individual's intentions to leave their current position will be measured with two items rated on a Likert scale where 1 = not likely at all and 4 = very likely. The two items are: "How often have you seriously considered leaving your job in the past six months?" and "How likely are you to leave your job in the next six months?"

Provider Expectations for Recovery Scale

The PERS is a refined 10-item scale used for staff to estimate specific positive outcomes for clients with whom they are currently working. They are asked to rate items on a five-point scale ranging from 1 = almost all to 5 = none. The scale has good internal consistency and has been shown to correlate with related constructs. (Salyers, Tsai, & Stultz, 2007; Salyers, Brennan, & Kean, 2013).

PROPOSED DATA ANALYSIS

Following data collection, descriptive statistics (e.g., means, standard deviations, and correlations) will be calculated for the independent (demographics) and dependent (test scores) variables using the statistical software SPSS (IBM Corp., 2017).

To examine the research questions regarding the efficacy of the intervention, a dependent samples *t*-test will be conducted on all measures to assess if mean differences exist between pre-intervention measures and post-intervention measures. This will be done to compare both follow up times to the pre-intervention testing, as well as between the follow up times. This is an appropriate statistical analysis as each of the samples can be matched on a particular characteristic. Using alpha .05, if a calculated *t*-value significant in difference from the critical *t*-value (for some measures this is higher and for some it is lower) after considering degrees of freedom (df) for dependent samples (N - 1) the null hypothesis (there is not a statistically significant difference between pre-intervention and post-intervention scores) will be rejected. A normal distribution is assumed in the dependent samples test of correlated mean differences, and this will be determined by a One-Sample Kolmogorov-Smirnov (KS) test.

Additionally, the study aims to be curious about the effects of demographic data in relation to burnout and in relation to intervention efficacy. In order to observe initial relationships, an Analysis of Variance (ANOVA) will be conducted to assess if differences exist between initial test scores by the individual components of demographics. A Tukey multiple comparison post-hoc test will then be conducted to determine mean differences between the independent variables. Additionally, a multiple linear regression analysis will be used to determine any predicting effects of the independent variables of demographics on intervention efficacy. Demographic variables will

be evaluated by what they add to the prediction of the dependent variable that is different from the predictability afforded by the other predictors in the model. An *F*-test will be used to observe whether the independent variables set predicts the dependent variable collectively. *R*-squared will be used to determine the variance in the dependent variable that can be accounted for by the independent variables. Finally, a *t*-test will be used to determine the significance of each independent variable and beta coefficients will be used to determine each independent variable's magnitude of prediction.

Chapter 6: Discussion

Burnout is a cross-cultural phenomenon experienced in many jobs and fields of work (Leiter & Schaufeli 1996; Stalker & Harvey 2002). Mental health service providers face unique stressors in their jobs that can lead to high rates of burnout (Sjølie et al., 2015; Honberg et al., 2011; Sørgaard et al., 2007). Burnout in providers can lead to poor mental and physiological outcomes for the providers (Acker, 2010; Peterson et al., 2008; Rohland, 2000), adverse client outcomes (Rollins et al., 2016; Gowdy et al., 2003; Holmqvist & Jeanneau, 2006; Garman et al., 2002), and adverse organizational outcomes (Acker, 2010; Salyers et al., 2015). Though burnout as a whole has been studied in some depth, there is a lack of evidence-based research specifically pertaining to providers in the mental health field, and the research that is available tends to lack a foundation in theory. Therefore, the proposed study aims to add to the literature of viable interventions for provider burnout in the mental health field while considering an observed theoretical framework.

The current study draws from social comparison theory and social exchange theory to describe the tendency of those experiencing burnout to not seek help for fear of embarrassment and increased feelings of incompetence. This study aims to address this issue, as well as issues of fiscal conservancy in organizations and time pressures of providers, by making the intervention a technology-based platform that is accessed at the providers discretion and on their own timeline, thus eliminating the interaction that induces embarrassment. This study also seeks to add to the literature by doing an exploratory study on the impact of various components of personal identity (race/ethnicity, education level, gender identity, socioeconomic status, etc.) on burnout and burnout intervention.

LIMITATIONS

This study faces a number of challenges. For starters, the study utilizes convenience sampling that is further dependent upon supervisor buy-in. This is a two-fold problem: firstly, convenience sampling may limit the generalizability of the study to broader populations since the study won't be chosen at random, and secondly, some supervisors might be more encouraging for faculty to complete the survey in its full which could have implications about the culture of the organization as a whole, and thus the burnout experienced in such locations. Additionally, the measures are all self-report, meaning there is room for response bias. Since the intervention is a technology-based intervention, though, every person regardless of location will be given the exact same material in the same way. This eliminates some of the variability that comes when different facilitators are distributing the intervention in various geographic locations. Finally, attrition is a potential problem, though we hope to eliminate this by offering organization-based incentives that supervisors have agreed upon. Finally, the method of the intervention makes it impossible to know which education and experiential modules are having the largest impact on burnout.

THEORETICAL AND PRACTICAL IMPLICATIONS

The current study will reiterate the need for further investigation into the field of mental health service provider burnout. Buunk & Schaufeli (1993) proposed that fear of judgment and embarrassment in social comparison prevents the most vulnerable populations in burnout from seeking out the education and help they need, and this lack of social support leads to isolation, feelings of incompetence, and further symptoms of burnout. With this theoretical framework in mind, it is imperative that providers have a place to seek out help in regard to burnout without the social stigma of admitting they

need help or the potentials of judgment. An intervention distributed in this manner has not been done before, so a benefit of the proposed study is that it addresses this need and will provide researchers the opportunity to analyze the efficacy of an intervention program based on the implications of social comparison theory.

The results of this study should encourage future researchers who study burnout to consider the impacts of social comparison theory in their work. In the future, for example, a mixed-methods study could be used to target focus groups in order to gain a further understanding of how social comparison plays a role in help-seeking behaviors. The goal of a study of this nature would be to address the aspects of an individual and their organizational culture that increases the negative effects of social comparison. Additionally, future studies could aim to do a more focused analysis of the intervention's individual components to determine which portions of the intervention have the highest effect on burnout intervention. Mixed methods could provide useful qualitative information about what parts of the intervention were helpful and what tools in the booster sessions were most frequently utilized in an attempt to gear future studies towards the most practical and helpful parts of the intervention.

Appendices

APPENDIX A

RECRUITMENT EMAIL

The details of the following email will be determined with individual supervisors as rewards for program completion will need to be established and approved on an organization basis.

Greetings!

My name is Leslie Lewis and I am a student researcher at The University of Texas at Austin. We are currently conducting a research project about burnout in mental health service providers and running a pilot study of a technology-based intervention. The intervention will take place over six weeks, with about 30 minutes of education and activities to be completed a week. Since this intervention is technology based and we know your time is extremely valuable, you can complete the sections at whatever time works best for your schedule! **Because burnout is a growing epidemic in your field, your supervisor has agreed to offer an extra vacation day to those that complete the study in its entirety, and CE credits will also be given**. Participation is completely voluntary, and your answers will be anonymous.

If you are interested, please click on the link for the primary survey and additional information: www.linktosurvey.com.

If you have any questions, please don't hesitate to contact me: leslielewis@utexas.edu.

Thank you for your time,

Leslie Lewis
The University of Texas at Austin

APPENDIX B

DEMOGRAPHIC QUESTIONNAIRE

Instructions: Please indicate out of the following options which best describes you.

---

1 What is your gender?
- Male
- Female
- Transgender
- Other

2 What is your race/ethnicity?
- African-American/Black
- Hispanic-American/Latina/Chicana
- Native-American/American Indian
- Asian-American
- Middle Eastern/North African American
- Caucasian/European-American/White
- Multiracial (Please specify)
- Other (Please specify)

3 What is your age?
- < 25 years old
- 25-30 years old
- 30-39 years old
- 40-49 years old
- 50-59 years old
- >60 years old

4 Which of the following best describes your sexual orientation?
- Heterosexual (straight)
- Homosexual (gay or lesbian)
- Bisexual
- Questioning
- I prefer not to answer

5 Which of the following best describes your relationship status?
- Single

- In a relationship
- Married
- Engaged
- Civil Union/Domestic Partnership
- Divorced
- Widowed
- Cohabitating
- Other (Please specify)

6 Which of the following best describes the area you were raised in?
- Urban
- Suburban
- Rural

7 Please indicate your current education level.
- High school
- Some college
- Associate's
- Bachelor's
- Masters
- Doctorate

8 Please select your parent/guardian's highest level of education. Please select for parent with highest level of education.
- Elementary School (Kindergarten - 4th Grade)
- Middle School (5th Grade - 8th Grade)
- High School (9th Grade - 12th Grade)
- College - did not graduate
- Graduated from college
- Higher education degree

9 Please indicate your current household income.
- Rather not say
- Under $10,000
- $10,000-$19,999
- $20,000-$29,999
- $30,000-$39,999
- $40,000-$49,999
- $50,000-$74,999
- $75,000-$99,999
- Over $100,000

APPENDIX C

MASLACH BURNOUT INVENTORY FOR HUMAN SERVICES

Instructions: Use the following scale and choose two numbers for each statement to indicate how frequently an item is experienced and how intense the experience is when it happens. Please check the box that says "Never" if an item is never experienced.

Frequency: o Never 1 = A few times a year 2 = Monthly 3 = A few times a month 4 = Every week 5 = A few times a week 6 = Daily
Intensity: 1 = Very mild, barely noticeable 4 = Moderate 7 = Very strong, major

---

1. I feel emotionally drained from my work.
2. I feel used up at the end of the workday.
3. I feel fatigued when I get up in the morning and have to face another day on the job.
4. Working with people all day is really a strain for me.
5. I feel burned out from my work.
6. I feel frustrated by my job.
7. I feel I'm working too hard on my job.
8. Working with people directly puts too much stress on me.
9. I feel like I'm at the end of my rope.
10. *I can easily understand how my recipients feel about things.*
11. *I deal very effectively with the problems of my recipients.*
12. *I feel I'm positively influencing other people's lives through my work.*
13. *I feel very energetic*
14. *I can easily create a relaxed atmosphere with my recipients.*
15. *I feel exhilarated after working closely with my recipients.*
16. *I have accomplished many worthwhile things in this job.*
17. *In my work, I deal with emotional problems very calmly.*
18. I feel I treat some recipients as if they were impersonal "objects."
19. I've become more callous toward people since I took this job.
20. I worry that this job is hardening me emotionally.
21. I don't really are what happens to some recipients.
22. I feel recipients blame me for some of their problems.
23. I feel similar to my recipients in many ways.
24. I feel personally involved with my recipients' problems.
25. I feel uncomfortable about the way I have treated some recipients.

NOTE: Italicized items are reverse coded.

APPENDIX D

JOB DIAGNOSTIC SURVEY

Instructions: On the following pages you will find several different kinds of questions about your job. Specific instructions are given at the start of each section. Please read them carefully. Please move through it quickly. The questions are designed to obtain your perceptions of your job and your reactions to it. There are no "trick" questions. Your individual answers will be kept completely confidential. Please answer each item as honestly and frankly as possible. For each question, select the number which is the most accurate description of your job.

Section 1

1. To what extent does your job require you to work closely with other people (either 'clients, or people in related jobs in your own organization)?

1 – Very little; dealing with other people is not at all necessary in acing the job.
2
3
4 – Moderately; some dealing with others is necessary.
5
6
7 – Very much; dealing with other people is an absolutely essential and crucial part of doing the job.

2. How much autonomy is there in your job? That.is, to what extent does your job permit you to decide on your own how to go about doing the work?

1 – Very little; the job gives me almost no personal "say" about how and when the work is done.
2
3
4 – Moderate autonomy; many things are standardized, and not under my control, but I can make some decisions about the work.
5
6
7 – Very much; the job gives me almost complete responsibility for deciding how and when the work is done.

3. To what extent does your job involve doing a "whole' and identifiable piece of work? That is, is the job a complete piece of work that has an obvious beginning and end? Or is it only a small part of the overall piece of work, which is finished-by other people or by automatic machines?

1 – My job is only a tiny part of the overall piece of work; the results of my activities cannot be seen in the final product or service.

2

3

4 – My job is a moderate-sized "chunk" of the overall piece of work; my own contribution can be seen in the final outcome.

5

6

7 – My job involves doing the whole piece of work, from start.to finish; the results of my, activities are easily seen in the final product or service.

4. How much variety is there in your job? That is, to what extent does the job require you to do many different things at work, using a variety of your skills and talents?

1 – Very little; the job requires me to do the same routine things over and over again.

2

3

4 – Moderate variety.

5

6

7 – Very much; the job requires me to do many different things, using a number of different skills and talents.

5. In general, how significant or important is your job? That is, are the results of your work likely to significantly affect the lives or well-being of other people?

1 – Not very significant; the outcomes of my work are not likely to have important effects on other people.

2

3

4 – Moderately significant.

5

6

7 – Highly significant; the outcomes of my work can affect other people in very important ways.

6. To what extent do managers or co-workers let you know how well you are doing on your job?

1 – Very little; people almost never let me know how well I am doing.

2

3

4 – Moderately; sometimes people may give me feedback, other times they may not.

5

6

7 – Very much; managers or coworkers provide me with almost constant "feedback" about how well I am doing.

7. To what extent does doing the job itself provide you with information about your work performance? That is, does the actual work itself provide clues about how well you are doing--aside from any "feedback" co-workers or supervisors may provide?

1 – Very little; the job itself is set up so I could work forever without finding out how well I am doing.

2

3

4 – Moderately; sometimes doing the job provides feedback to me, sometimes it does not.

5

6

7 – Very much; the job is set up so that I get almost constant "feedback" as I work about how well I am doing.

Section 2

Instructions: Listed below are a number of statements which could be used to describe a job. You are to indicate whether each statement is an accurate or an inaccurate description of your lob. Once again, please try to be as objective as you can in deciding how accurately each statement describes your job regardless of whether you like or dislike your job. Choose a number for each item based on the following scale:

How accurate is the statement in describing your job?
1 = Very Inaccurate 2 = Mostly Inaccurate 3 = Slightly Inaccurate 4 = Uncertain
5 = Slightly Accurate 6 = Mostly Accurate 7 = Very Accurate

---

1. The job requires me to use a number of complex or high-level skills.
2. The job requires a lot of cooperative work with other people.
3. The job is arranged so that I do not have the chance to do an entire piece of work from beginning to end.
4. Just doing the work required by the job provides many chances for me to figure out how well I am doing.
5. The job is quite simple and repetitive.
6. The job can be done adequately by a person working alone--without talking or checking with other people.

7. The supervisors and co-workers on this job almost never give me any "feedback" about how well I am doing in my work.
8. This job is one where a lot of other people can be affected by how well the 'work gets done.
9. The job denies me any chance to use my personal initiative or judgment in carrying out the work.
10.Supervisors often let me know how well they think I am performing the job.
11. The job provides me the chance to completely finish the pieces of work I begin.
12. The job itself provides very few clues about whether or not I am performing.
13. The job gives me considerable opportunity for independence and freedom in how I do the work.
14. The job itself is not very significant or important in the broader scheme of things.

Section 3

Instructions: Now please indicate how you personally feel about your job. Each of the statements below is something that a person might say about his or her job. You are to indicate your own personal feelings about your job by marking how much you agree with each of the statements. Choose a number for each item based on the following scale:

How much do you agree with the statement?
1 = Disagree Strongly 2 = Disagree 3 = Disagree Slightly 4 = Neutral
5 = Agree Slightly 6 = Agree 7 = Agree Strongly

---

1. It's hard, on this job, for me to care very much about whether or not the work gets done right.
2. My opinion of myself goes up when I do this job well.
3. Generally speaking, I am very satisfied with this job.
4. Most of the things I have to do on this job seem useless or trivial.
5. I usually know whether or not my work is satisfactory on this job.
6. I feel a great sense of personal satisfaction when I do this job well.
7. The work I do on this job is very meaningful to me
8. I feel a very high degree of personal responsibility for the work I do on this job.
9. I frequently think of quitting this job.
10. I fee1 bad and unhappy when I discover that I have performed poorly on this job.
11. I often have trouble figuring out whether I'm doing well or poorly on this job.
12. I feel I should personally take the credit or blame for the results of my work on this job.
13. I am generally satisfied with the kind of work I do in this job.

14. My own feelings generally are not affected much one way or the other by how well I do on this job.
15. Whether or not this job gets done right is clearly my responsibility.

Section 4

Instructions: Now please indicate how satisfied you are with each aspect of your job listed below. Once again, choose a number for each item based on the following scale:

How satisfied are you with this aspect of your job?
1 = Extremely Satisfied 2 = Dissatisfied 3 = Slightly Satisfied 4 = Neutral
5 = Slightly Satisfied 6 = Satisfied 7 = Extremely Satisfied

---

1. The amount of job security I have.
2. The amount of pay and fringe benefits I receive.
3. The amount of personal growth and development I get in doing my job.
4. The people I talk to and work with on my job.
5. The degree of respect and fair treatment I receive from my boss.
6. The feeling of worthwhile accomplishment I get from doing my job.
7. The chance to get to know other people while on the job.
8. The amount of support and guidance I receive from my supervisor.
9. The degree to which I am fairly paid for what I contribute to this organization.
10. The amount of independent thought and action I can exercise in my job.
11. How secure things look for me in the future in this organization.
12. The chance to help other people while at work.
13. The amount of challenge in my job.
14. The overall quality of the supervision I receive in my work.

Section 5

Instructions: Now please think of the other people in your organization who hold the same job you do. If no one has exactly the same job as you, think of the job which is most similar to yours. Please think about how accurately each of the statements describes the feelings of those people about the job. It is quite all right if your answers here are different from when you described your own reactions to the job. Often different people feel quite differently about the same job. Once again, choose a number for each item based on the following scale:

How much do you agree with the statement?
1 = Disagree Strongly 2 = Disagree 3 = Disagree Slightly 4 = Neutral
5 = Agree Slightly 6 = Agree 7 = Agree Strongly

---

1. Most people on this job feel a great sense of personal satisfaction when they do the job well.
2. Most, people on this job are very satisfied with the job.
3. Most people on this job feel that the work is useless or trivial.
4. Most people on this job feel a. great deal of personal responsibility for the work they do.
5. Most people on this job have a pretty good idea of how well they are performing their work.
6. Most people on this job find the work very meaningful.
7. Most people on this job feel that whether or not the job gets done right is clearly their own responsibility.
8. People on this job often think of quitting.
9. Most people on this job feel bad or unhappy when they find that they have performed the work poorly.
10. Most people on this job have trouble figuring out whether they are doing a good or a bad job.

APPENDIX E

PROVIDER EXPECTATIONS FOR RECOVERY SCALE

Instructions: Use the following scale and choose one for each statement to indicate how many of your current patients the sentence represents.

1 = None 2 = Some 3 = About half 4 = Most 5 = Almost all

---

1. Will be able to greatly increase their involvement in the community.
2. Will be able to function very well in the community.
3. Will be able to have satisfying intimate relationships.
4. Will be able to have satisfying friendships.
5. Will be able to achieve personal goals.
6. Will be able to work in a competitive job (in the community for real wages).
7. Will be able to cope successfully with persistent symptoms.
8. Will be able to take medications independently.
9. Will be able to participate in leisure, hobbies, and recreational activities. *
10. Will be able to pursue spiritual/religious activities. *
11. Will be able to live in their own apartment or home.

NOTE: *indicates answers that are averaged together; activities are related, but not redundant (Salyers, Brennan, & Kean, 2013)

References

Acker, G. M. (2010). The challenges in providing services to clients with mental illness: Managed care, burnout and somatic symptoms among social workers. *Community Mental Health Journal*, *46*, 591– 600.

Affleck, G., & Tennen, H. (1991). Social comparison and coping with major medical problems. In J. Suls & T.A. Wills (Eds.), *Social comparison: Contemporary theory and research* (pp. 369-394). Hillsdale, NJ: Erlbaum.

Awa, W. L., Plaumann, M., & Walter, U. (2010). Burnout prevention: A review of intervention programs. *Patient Education and Counselling, 78*(2), 184–190.

Bittman, B., Bruhn, K. T., Stevens, C., Westengard, J., & Umbach, P.O. (2003). Recreational music-making: A cost-effective group interdisciplinary strategy for reducing burnout and improving mood states in long-term care workers. *Advances in Mind-Body Medicine*, *19*(3–4), 4–15.

Blalock, S.J., McEvoy-DeVellis, B., & DeVellis, R.F. (1989). Social comparison among individuals with rheumatoid arthritis. *Journal of Applied Social Psychology, 19,* (8), 665-680.

Borritz, M., Rugulies, R., Bjorner, J. B., Villadsen, E., Mikkelsen, O. A., & Kristensen, T. S. (2006). Burnout among employees in human service work: Design and baseline findings of the PUMA study. *Scandinavian Journal of Public Health*, *34*, 49–58.

Burke, R. J., & Richardsen, A. M. (1993). Psychological burnout in organizations. In R. T. Golembiewski (Ed.), *Handbook of organizational behavior*. New York: Marcel Dekker.

Buunk, B.P., Collins, R., Van Yperen, N.W., Taylor, S.E., & Dakoff, G. (1990). Upward and downward comparisons: Either direction has its ups and downs. *Journal of Personality & Social Psychology, 59,* 1238-1249.

Buunk, B.P., & Schaufeli, W.B. (1993). Burnout: A perspective from social comparison theory. In W. B. Schaufeli, C. Maslach, & T. Marek (Eds.), Professional burnout: Recent developments in theory and research (pp. 19–32). Washington, DC: Taylor & Francis.

Buunk, B.P., VanYperen, N.W. (1991). Referential comparisons, relational comparisons and exchange orientation: Their relation to marital satisfaction. *Personality &Social Psychology Bulletin, 17,* 710-718.

Buunk, B.P., VanYperen, N.W., Taylor, S.E., & Collins, R.B. (1991). The drive upward in social comparison theory revisited. *European Journal of Social Psychology, 21,* 529-546.

Canfield, J. (2005). Secondary traumatization, burnout, and vicarious traumatization: A review of the literature as it relates to therapists who treat trauma. *Smith College Studies in Social Work, 75*(2), 81–101.

Cherniss, C. (1980). Staff burnout: Job stress in the human services. Beverly Hills, CA: Sage.

Cherniss, C., & Krantz, D.L. (1983). The ideological community as an antidote to burnout in the human services. In B. Farber (Ed.), *Stress and burnout in the human service professions* (pp. 198-212), New York: Pergamon Press.

Dreison, Luther, Bonfils, Sliter, McGrew, & Salyers (2016). Job Burnout in Mental Health Providers: A Meta-Analysis of 35 Years of Intervention Research. *Journal of Occupational Health Psychology, 23*(1), 18–30

Dunkley, J., & Whelan, T. A. (2006). Vicarious traumatisation: Current status and future directions. British Journal of Guidance & Counselling, *34*(1), 107–116.

Edelwich, J., & Brodsky, A. (1980). *Burn-out: Stages of disillusionment in the helping professions.* New York: Human Sciences Press.

Elliasz, A. (1980). Temperament and trans-situational stability of behavior in the physical and social environment. *Polish Psychological Bulletin, 11,* 143-153.

Faul, F., Erdfelder, E., Buchner, A., & Lang, A.-G. (2009). Statistical power analyses using G*Power 3.1: Tests for correlation and regression analyses. *Behavior Research Methods, 41,* 1149-1160.

Festinger, L. (1954). A theory of social comparison processes. *Human Relations, 7,* 117-140.

Figley, C. R. (1995). Compassion fatigue as secondary traumatic stress disorder: An overview. In C. R. Figley (Ed.), Compassion fatigue: Coping with secondary traumatic stress disorder in those who treat the traumatized (pp. 1–20). Philadelphia, PA, USA: Brunner/Mazel.

Fried, Y (1991). Meta-analytic comparison of the Job Diagnostic Survey and Job Characteristics Inventory as correlates of work satisfaction and performance. *Journal of Applied Psychology*, *76*:690-697.

Ganster, D.C. (1989). Worker control and well-being: A review of the research in the workplace. In S.L. Sauter, J.J. Hurrell, & C. Cooper, *Job control and worker health* (pp. 3-24). Chichester: John Wiley and Sons.

Garman, A. N., Corrigan, P. W., & Morris, S. (2002). Staff burnout and patient satisfaction: Evidence of relationships at the care unit level. *Journal of Occupational Health Psychology*, *7*(3), 235–241.

Gerard, H.B. (1963). Emotional uncertainty and social comparison. *Journal of Abnormal & Social Psychology, 66,* 586-573.

Gilbody, S., Cahill, J., Barkham, M., Richards, D., Bee, P., & Glanville, J. (2006). Can we improve the morale of staff working in psychiatric units? A systematic review. *Journal of Mental Health*, *15*(1), 7–17.

Golembiewski, R.T., & Munzenrider, R.F. (1988). *Phases of burnout: Developments in concepts and applications.* New York: Praeger.

Gowdy, E. A., Carlson, L. S., & Rapp, C. A. (2003). Practices differentiating high-performing from low-performing supported employment programs. *Psychiatric Rehabilitation Journal*, *26*, 232–239.

Hackman, J.R., & Oldham, G.R., (1975). Development of the Job Diagnostic Survey. *Journal of Applied Psychology*, *60*:159-170.

Hoge, M. A., Morris, J. A., Daniels, A. S., Stuart, G. W., Huey, L. Y., & Adams, N. (2007). An action plan for behavioral health workforce development: A framework for discussion. Rockville, MD.

Holmqvist, R., & Jeanneau, M. (2006). Burnout and psychiatric staff's feelings towards patients. *Psychiatry Research*, *145*(2–3), 207–213.

Honberg, R., Kimball, A., Diehl, S., Usher, L., & Fitzpatrick, M. (2011). State mental health cuts: The continuing crisis. Retrieved from https://www.nami.org/getattachment/About-NAMI/Publications/Reports/StateMentalHealthCuts2.pdf

IBM Corp. Released 2017. IBM SPSS Statistics for Windows, Version 25.0. Armonk, NY: IBM Corp.

Krasner, M. S., Epstein, R. M., Beckman, H., Suchman, A. L., Chapman, B., Mooney, C. J., et al. (2009). Association of an educational program in mindful communication with burnout, empathy, and attitudes among primary care physicians. *JAMA: Journal of the American Medical Association, 302*(12), 1284–1293.

Leiter, M. P., & Schaufeli, W. B. (1996). Consistency of the burnout construct across occupations. *Anxiety, Stress & Coping: An International Journal*, 9(3), 229–243.

Lum, L., Kervin, J., Clark, K., Reid, F., & Sirola, W. (1998.) Explaining nursing turnover intent: Job satisfaction, pay satisfaction, or organizational commitment. *Journal of Organizational Behavior*, *19,* 305–320.

Maslach, C. (1982). *Burnout: The cost of caring*. Englewood Cliffs, NJ: Prentice-Hall.

Maslach, C. (1993). Burnout: A multidimensional perspective. In W. B. Schaufeli, C. Maslach, & T. Marek (Eds.), Professional burnout: Recent developments in theory and research (pp. 19–32). Washington, DC: Taylor & Francis.

Maslach, C., Jackson, S. E., & Leiter, M. P. (1996). Maslach burnout inventory manual (3rd ed.). Palo Alto, California: Consulting Psychologists Press.

Maslach, C., Schaufeli, W. B., & Leiter, M. P. (2001). Job burnout. *Annual Review of Psychology*, *52,* 397–422.

Molleman, E., Pruyn, J., & Van Knippernberg, A. (1986). Social comparison processes among cancer patients. *British Journal of Social Psychology, 25,* 1-13.

Morse, G., Salyers, M. P., Rollins, A. L., Monroe-DeVita, M., & Pfahler, C. (2012). Burnout in mental health services: A review of the problem and its remediation. *Administration and Policy in Mental Health and Mental Health Services Research*, *39*, 341–352.

Murphy, L. R. (1996). Stress management in work settings: A critical review of the health effects. *American Journal of Health Promotion: AJHP*, *11*(2), 112–135.

Oddie, S., & Ousley, L. (2007). Assessing burn-out and occupational stressors in a medium secure service. *The British Journal of Forensic Practice*, *9*(2), 32–48.

Peterson, U., Demerouti, E., Bergström, G., Samuelsson, M., Åsberg, M., & Nygren, A. (2008). Burnout and physical and mental health among Swedish healthcare workers. *Journal of Advanced Nursing*, *62,* 84–95.

Pines, A., & Aronson, E. (1988). Career burnout: Causes and cures. New York, NY, USA: Free Press.

Prosser, D., Johnson, S., Kuipers, E., Szmukler, G., Bebbington, P., & Thornicroft, G. (1997). Perceived sources of work stress and satisfaction among hospital and community mental health staff, and their relation to mental health, burnout and job satisfaction. *Journal of Psychosomatic Research*, *43*(1), 51–59.

Robey, K., Ramsland, S. E., & Castelbaum, K. (1991). Alignment of agency and personal missions: An evaluation. *Administration and Policy in Mental Health*, *19*(1), 39–45.

Rohland, B. M. (2000). A survey of burnout among mental health center directors in a rural state. *Administration and Policy In Mental Health*, *27*(4), 221–237.

Rollins, A. L., Kukla, M., Morse, G., Davis, L., Leiter, M., Monroe- DeVita, M., . . . Salyers, M. P. (2016). Comparative effectiveness of a burnout reduction intervention for behavioral health providers. *Psychiatric Services*.

Rupert, P. A., & Kent, J. S. (2007). Gender and work setting differences in career-sustaining behaviors and burnout among professional psychologists. *Professional Psychology: Research and Practice*, *38*(1), 88–96.

Salyers, M.P., Brennan, M., & Kean (2013). Provider Expectations for Recovery Scale: Refining a measure of provider attitudes. *Psychiatric Rehabilitation Journal*, *36*(3): 153–159.

Salyers, M. P., Fukui, S., Rollins, A. L., Firmin, R., Gearhart, T., Noll, J. P., . . . Davis, C. J. (2015). Burnout and self-reported quality of care in community mental health. *Administration and Policy in Mental Health and Mental Health Services Research*, *42*, 61–69.

Salyers, M.P., Hudson, C., Morse, G., Rollins, A.L., Monroe-DeVita, M., Wilson, C., & Freeland, L., (2011). BREATHE: A pilot study of a one-day retreat to reduce burnout among mental health professionals. *Psychiatric Services*, *62*, 214 –217.

Salyers, M.P., Tsai, J., & Stultz, T.A. (2007). TA: Measuring recovery orientation in a hospital setting. *Psychiatric Rehabilitation Journal*, *31*:131-137.

Siebert, D. C. (2005). Personal and occupational factors in burnout among practicing social workers: Implications for research, practitioners, and managers. *Journal of Social Service Research*, *32*(2), 25–44.

Sjølie, H., Binder, P. E., & Dundas, I. (2015). Emotion work in a mental health service setting. Qualitative Social Work: Research and Practice. Advance online publication.

Sørgaard, K. W., Ryan, P., Hill, R., & Dawson, I., & the OSCAR Group. (2007). Sources of stress and burnout in acute psychiatric care: Inpatient vs. community staff. *Social Psychiatry and Psychiatric Epidemiology*, *42*, 794–802.

Stalker, C., & Harvey, C. (2002). Professional burnout: A review of theory research, and prevention Partnerships for Children and Families Project. Waterloo: Wilfrid Laurier University.

Strelau, J. (1983). *Temperament, personality, activity.* New York: Academic Press.

Sullins, E.S. (1991). Emotional contagion revisited: Effects of social comparison and expressive style on mood convergence. *Personality & Social Psychology Bulletin, 17*, 166-174.

Taylor, S., Buunk, B.P., & Aspinwall, L. (1990). Social comparison, stress and coping. *Personality & Social Psychology Bulletin*, *16,* 74-89.

Taylor, S.E., & Lobel, M. (1989) Social comparison activity under threat: Downward evaluation and upward contacts. *Psychological Review, 96,* 569-575.

van Dierendonck, D., Garssen, B., & Visser, A. (2005). Burnout prevention through personal growth. *International Journal of Stress Management*, *12*(1), 62–77.

van Dierendonck, D., Schaufeli, W. B., & Buunk, B. P. (1998). The evaluation of an individual burnout intervention program: The role of inequity and social support. *Journal of Applied Psychology*, *83*(3), 392–407.

VanYperen, N.W., Buunk, B.P., & Schaufeli, W.B. (1992). Imbalance, communal orientation and the burnout syndrome among nurses. *Journal of Applied Social Psychology, 22,* 173-189.

Walster, E., Berscheid, E., & Walster, G.W. (1978). *Equity: Theory and research.* Boston: Allyn and Bacon.

Wills, T.A. (1981). Downward comparison principles in social psychology. *Psychological Bulletin, 90,* 245-271.

Webster, L., & Hackett, R. K. (1999). Burnout and leadership in community mental health systems. *Administration and Policy in Mental Health*, *26*(6), 387–399.

Wood, J.V., Taylor, S.E., & Lichtman, R.R. (1985). Social comparison in adjustment to breast cancer. *Journal of Personality & Social Psychology*, *49*, 1169-1183.